SPECIAL REPORT: Can The OMG Unite Your Enterprise? *page 38*

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FOR CORPORATE COMPUTING PROFESSIONALS WORLDWIDE

APRIL 15, 1992

John Kish,
VP of desktop products
Oracle Corp.,
with Oracle's Server For NetWare

Oracle's DBMS Engine For NetWare

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Tiny PC Cards Pack A Punch
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NetWare's Latest Mainframe Link *page 62*

A Guide To Balancing Per-User Pricing
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AS/400 Storage Suite Swells *page 84*

BUYER'S GUIDE
DOCUMENT MANAGEMENT
PAGE 90

DATAMATION
FOR CORPORATE COMPUTING PROFESSIONALS WORLDWIDE

ON THE COVER: Oracle's Kish has his hands on an RDBMS that flies, page 28.

FEATURES

COVER STORY

28 Oracle's DBMS Engine For NetWare

This month marks the release of the second version of Oracle's Server For NetWare, the first full-bore SQL relational database for NetWare, whose mission is to bring errant LAN data under control.

SPECIAL REPORT

38 Can The OMG Unite Your Enterprise?

The Object Management Group promises enterprisewide, interoperable bliss through object technology. But you'll have to wait a while.

PRODUCT GUIDE: Open + Voice Inc.'s Masterson is on call, home or away, page 87.

PRODUCT GUIDE

87 Phone + Computer = Application

Open + Build version 2.0, which runs under OS/2, creates interactive voice response applications that integrate voice, fax and database technologies.

88 CUA For xBase Development

WordTech Systems Inc. has spent the last two years rewriting its xBase development tools, the dBXL development language and QuickSilver command-line compiler.

BUYER'S GUIDE

90 A Window Into Document Management

Windows-based document management systems don't just keep track of documents, they can change the way you work—for the better.

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PCs & WORKSTATIONS

47 CD-ROM Reaches For Critical Mass

Hot new products, plummeting costs and developer-friendly authoring systems are making CD-ROM more desirable than ever.

55 Tiny PC Cards Pack A Punch

The latest PCMCIA standard is ushering in new PC peripherals that pack the power of bulky boards into tiny credit-card-sized containers.

NETWORKS

62 NetWare's Latest Mainframe Link

Here's how NetWare For SAA eliminates some of the bottlenecks and limitations of Novell's earlier SNA connectivity products.

SOFTWARE

71 Tips On Reengineering Redundant Software

Redundant code, be gone! Just follow these simple steps to speed the process of re-engineering your old unstructured spaghetti code.

79 A Guide To Balancing Per-User Pricing

Machine-based software pricing is out. User-based pricing is in. Software costs may shrink, but license management headaches won't.

MIDRANGE/MAINFRAME

84 AS/400 Storage Suite Swells

Alternatives to IBM DASD are growing as third parties offer better prices, greater capacity, faster performance and even some RAID devices.

Quebec & Ontario Paper's Bagozzi seeks a performance boost, page 84.

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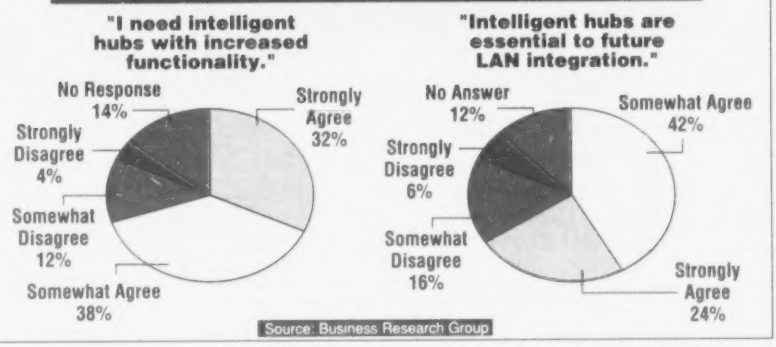
Wiring Hubs Smarten Up

These days, network managers want their wiring hubs to do a whole lot more than just sit there and look important; they want hubs that are smart enough to help manage multivendor environments. In the latest survey of DATAMATION's Technology Panel, nearly two-thirds of panel members agree with the statement: "intelligent hubs will play an integral role in our efforts to integrate local area networks."

Wiring hubs are no longer just simple tools with which to organize network wiring; they're now capable of playing a central role in integrated network management. Vendors are responding to users' needs to accommodate multiple types of cabling, such as coaxial, fiber optic and twisted pair, by offering "intelligent," or "smart," hubs. These have advanced network management, bridging, routing and port monitoring capabilities for remote network configuration.

Hubs Respond: "Don't Call Us Dumb!"



Source: Business Research Group

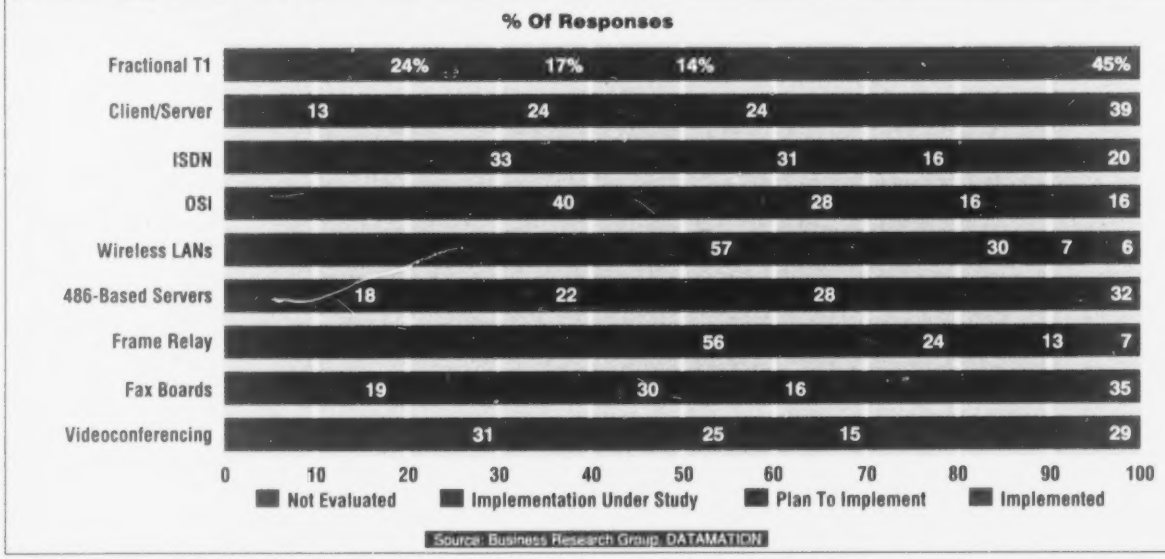
Eighteen percent of panel members have already implemented smart hubs, 10% have definite plans to implement them and 19% have begun to evaluate the role of the smart hub in their LAN integration plans.

Vendors increasingly are putting more security and failsafe features into their intelligent hubs. For example, many of today's newer models incorporate redundant modules to bring a measure of fault tolerance to the network.

The market for intelligent hubs is expected to reach $750 million this year. Market leaders include Cabletron Systems Inc. in Rochester, N.H.; Chipcom Corp. in Southborough, Mass.; and three Santa Clara firms—SynOptics Communications Inc., 3Com Corp. and Ungermann-Bass Inc. ■

Warren Childs and Kathryn A. Tito, Business Research Group. For more information, call Nancy Finn at (617)-964-6204, send her a fax at (617)-558-4402 or write to her at the Business Research Group, 275 Washington Street, Newton, MA 02158.

DATAMATION's Technology Implementation Index: Networks/Communications


% Of Responses
Fractional T1 24% 17% 14% 45%
Client/Server 13 24 24 39
ISDN 33 31 16 20
OSI 40 28 16 16
Wireless LANs 57 30 7 6
486-Based Servers 18 22 28 32
Frame Relay 56 24 13 7
Fax Boards 19 30 16 35
Videoconferencing 31 25 15 29
0 10 20 30 40 50 60 70 80 90 100
Not Evaluated
Implementation Under Study
Plan To Implement
Implemented

Source: Business Research Group, DATAMATION

■ DATAMATION each month surveys a select group of its readers–the DATAMATION Technology Panel–to investigate the implementation of new technologies by key user organizations.

From Gotcha! To Hot Cha Cha!

Remember the hopes for economic recovery last year? A nascent manufacturing recovery began in the middle of 1990 and, hopes were, it would turn into a strong rebound in 1991. But then the Gulf War came along, and the recovery fizzled out.

Now the signs of an incipient recovery are once again sprouting, but this time it looks like the real thing. Since early last winter, in fact, manufacturing has given off weak but steady signals that a recovery is slowly forming and that business confidence is finally returning after a sporadic period in and out of the doldrums.

According to Cahners Economics's monthly surveys of the level of U.S. business confidence, the confidence index for the manufacturing sector rose steadily from 61.9 in July 1991 to 65.5 in October, but then dropped in November and December, hitting a low of 57.4.

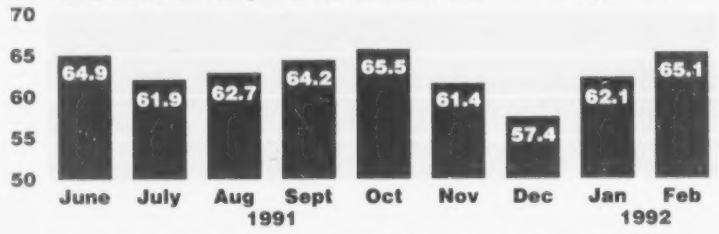
Cahners Economics expects that by the second half of this year low interest rates combined with pent-up demand, relatively high capacity utilization rates and low inventories will once more inspire business spending.

Business confidence is already giving an inkling of the recovery's arrival. Cahners Economics's Business Confidence Index for the manufacturing sector rose strongly in January to 62.1; the December 1991 figure was 57.4. The index jumped again in February to 65.1, which means that more companies are expecting increases in sales and capital spending. So, look for improved growth in your information systems budgets later in 1992 and 1993. ■

Madeline Franchi, Cahners Economics. For more information on Cahners Economics's forecasting services, including seminars, newsletters and database diskettes, call Dan Buchan at (617)-630-2105, send him a fax at (617)-630-2100 or write to him at Cahners Economics, 275 Washington Street, Newton, MA 02158.

Here Comes Mister FeelGood Again

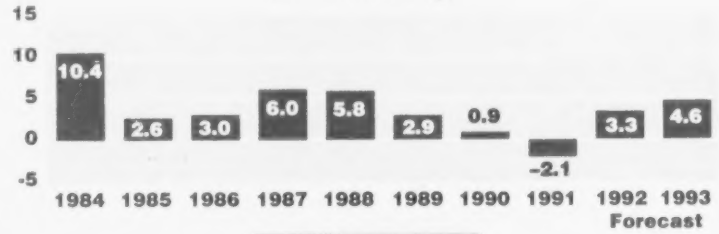
Cahners Business Confidence Index, Manufacturing Sector



Note: Cahners Business Confidence Index is calculated by summing the share of responses indicating increases plus one-half responses indicating unchanged over the next three months.

Source: Cahners Economics

Manufacturing Industrial Production
Annual % Change



Source: Federal Reserve Board; Forecasts: Cahners Economics

The Economy At A Glance

U.S. Economy: Macroeconomic And Industrial Indicators

	Actual		Forecast (Annual % Change)		
	Q3/91	Q4/91	1991	1992	1993
Gross National Product	1.8	0.3	-0.7	2.0	3.2
Business Investment In Equipment	6.7	0.6	-3.2	2.9	4.0
Government Spending	-3.4	-5.9	0.8	-2.5	2.4
Consumer Spending	2.3	-1.1	-0.2	1.8	2.9
Exports	7.3	15.4	6.7	7.0	3.8
Imports	22.3	-2.0	0.0	4.6	2.4

All calculations are % change in 1987 dollars; quarterly figures are seasonally adjusted annual rates

	Dec. 1991	Nov. 1991	% Change 12/91-11/91	Dec. 1990	% Change 1991-1990
Manufacturing Production (1)					
Process Industries Total	108.2	107.8	0.3	106.7	1.4
Chemicals	113.7	113.0	0.6	109.9	3.5
Petroleum	107.2	106.7	0.5	105.6	1.5
OEM Total	109.2	110.0	-0.7	109.0	0.2
Computers & Peripherals	159.3	158.5	0.5	148.9	7.0
Communications Equipment	112.9	112.4	0.4	108.9	3.7
Transportation Equipment	97.9	99.7	-1.8	96.6	1.3
Services Employment (2)					
Finance, Insurance, Real Estate	6.675	6.673	0.0	6.714	-0.6
Health Care	8.431	8.390	0.5	8.026	5.1
Computer & Data Processing	0.859	0.853	0.6	0.805	6.7
Transportation/Utilities	5.853	5.864	-0.2	5.917	-1.1
Retail Trade	19.811	19.554	1.3	20.182	-1.8
Wholesale Trade	6.029	6.050	-0.3	6.172	-2.3
Government	18.818	18.870	-0.3	18.653	0.9

(1) Index 1978=100, seasonally adjusted
(2) Millions of persons, not seasonally adjusted

Source: Commerce Dept. and Cahners Economics

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